

PATENT 03DV-7116 ARG

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent No.: 6,633,097 B2

Issued: October 14, 2003

Inventors: Dunlap et al.

Assignee: General Electric Company

For: MECHANICAL JOINING FOR WATER

COOLED MOTOR FRAME

Certificate

OCT 1 9 2005

of Correction

#### CERTIFICATE OF MAILING

I certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Decisions and Certificate of Correction Branch, P.O. Box 1450, Alexandria, VA 22313-1459, on October 12, 2005.

Phillip A. Shipley Reg. No. 51,357

Decisions and Certificate of Correction Branch P.O. Box 1450 Alexandria, VA 22313-1450.

### REQUEST FOR RECONSIDERATION

Sir:

Applicants respectfully request reconsideration of the request for the issuance of a certificate of correction for the above-identified patent.

Submitted herewith is a copy of the Notice of Allowance and Fee(s) Due and the Notice of Allowability dated April 23, 2003 with the Examiner accepting an Amendment filed on March 19, 2003. The request for certificate of correction included the following:

In Claim 8, column 6, line 24, after "first stator frame end;" insert -- a second end shield secured to said second stator frame end; and --.

The requested correction is in-line with Claim 8 shown in the accepted Amendment.

Therefore, Applicants respectfully request reconsideration of the changes indicated in the request for certificate of correction dated March 7, 2005.

For your convenience, Applicants hereby submit a copy of the Request for Certificate of Correction and the Certificate of Correction Form PTO/SB/44 mailed March 7, 2005, and the USPTO Response to the Request for Certificate of Correction dated April 18, 2005.

The Assignment for this patent is recorded on Reel 011946/ Frame 0702.

Respectfully submitted,

Date: 10/6/5

Phillip A. Shipley Reg. No. 51,357

ARMSTRONG TEASDALE LLP One Metropolitan Square, Suite 2600 St. Louis, Missouri 63102-2740 (314) 621-5070



INFED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

### NOTICE OF ALLOWANCE AND FEE(S) DUE

23465 04/23/2003

JOHN S. BEULICK C/O ARMSTRONG TEASDALE, LLP ONE METROPOLITAN SQUARE SUITE 2600 ST LOUIS, MO 63102-2740

EXAMINER TAMAI, KARL I					
2834	310-054000				

DATE MAILED: 04/23/2003

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,501	09/10/2001	Robert A. Dunlap	03-DV-7116	7906

TITLE OF INVENTION: MECHANICAL JOINING FOR WATER-COOLED MOTOR FRAME

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1300	\$300	\$1600	07/23/2003

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED.</u> THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

☐ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

Page 1 of 4

PTOL-85 (REV. 04-02) Approved for use through 01/31/2004.

Date: 4/28/03 By: \_\_\_\_\_

12552-330

OPE. HAD			
OCT 17 2005 度 tice of Allowability	Application No.	Applicant(s)	
CO 17 Los Allowability	09/682,501	DUNLAP ET AL.	
\ 0 <sup>C\</sup>	Examiner	Art Unit	
THENT & TRADERANT	Tamai IE Karl	2834	
The MAILING DATE of this communication application application application and all claims being allowable, PROSECUTION ON THE MERITS I nerewith (or previously mailed), a Notice of Allowance (PTOL-8: NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT of the Office or upon petition by the applicant. See 37 CFR 1.3:	S (OR REMAINS) CLOSED 5) or other appropriate comp RIGHTS. This application is	in this application. If not includ munication will be mailed in due	ed course. <b>THIS</b>
<ol> <li>This communication is responsive to <u>3/19/03</u>.</li> <li>The allowed claim(s) is/are <u>1-15</u>.</li> </ol>			
<ol> <li>The allowed claim(s) is/are <u>1-15</u>.</li> <li>The drawings filed on <u>10 September 2001</u> are accepted</li> </ol>	by the Examiner		
Acknowledgment is made of a claim for foreign priority u		or (f).	
a) All b) Some* c) None of the:	• (,,,,	•	
1.   Certified copies of the priority documents ha	ve been received.		
2. Certified copies of the priority documents ha	ve been received in Applica	tion No	
<ol><li>Copies of the certified copies of the priority of</li></ol>	documents have been receiv	ved in this national stage applica	ation from the
International Bureau (PCT Rule 17.2(a)).			
* Certified copies not received:			
5. Acknowledgment is made of a claim for domestic priority			
(a) The translation of the foreign language provisional			
3. Acknowledgment is made of a claim for domestic priority	under 35 U.S.C. 99 120 an	u/or 121.	
Applicant has THREE MONTHS FROM THE "MAILING DATE" below. Failure to timely comply will result in ABANDONMENT of	of this communication to file of this application. THIS TH	e a reply complying with the require a reply complying with the require a reply in the require a reply complying with the requirement of the reply complying with th	uirements noted EXTENDABLE
7. A SUBSTITUTE OATH OR DECLARATION must be sub NFORMAL PATENT APPLICATION (PTO-152) which gives re			NOTICE OF
3. CORRECTED DRAWINGS must be submitted.			
(a) including changes required by the Notice of Draftsp	erson's Patent Drawing Rev	view ( PTO-948) attached	
1) hereto or 2) to Paper No			
(b)  including changes required by the proposed drawing		hich has been approved by the	
(c) (c) including changes required by the attached Examin	er's Amendment / Commen	t or in the Office action of Paper	r No
Identifying indicia such as the application number (see 37 CFF of each sheet. The drawings should be filed as a separate pap			
). DEPOSIT OF and/or INFORMATION about the deputtached Examiner's comment regarding REQUIREMENT FOR			Note the
Attachment(s)			
<ul> <li>I ☐ Notice of References Cited (PTO-892)</li> <li>I ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)</li> <li>I ☐ Information Disclosure Statements (PTO-1449), Paper No.</li> <li>☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ul>	4	e of Informal Patent Application riew Summary (PTO-413), Pape iner's Amendment/Comment iner's Statement of Reasons for	er No



THE UNITED STATES PATENT OFFICE IS REQUESTED TO IMPRESS ITS STAMP ON THIS CARD AND PLACE SAME IN THE OUTGOING MAIL TO SHOW THE FOLLOWING PAPERS HAVE BEEN RECEIVED.

Atty Dkt. No.: 03-DV-7116 (12552-330)

Applicants: Dunlap, et al. Serial No.: 09/682,501

Filed: September 10, 2001

For: MECHANICAL JOINING FOR WATER-COOLED MOTOR FRAME

Enclosed:

• Amendment in response to Office Action of 1/16/03 (5pgs)

• Submission of Marked Up Claims (2pgs)

Amendment transmittal form (3 pgs.- in duplicate)

Certificate of Mailing via Express Mail (1 page)

Return post card

DMF:mc

Express Mail Label No: EV263875235US Mailed: March 19, 2003

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OCT 17 2005

For:

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

TRADE AND HICANT: Dunlap et al.

Art Unit: 2834

Serial No.: 09/682,501

Examiner: Tamai, K.

Filed: September 10, 2001

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MECHANICAL JOINING FOR

WATER-COOLED MOTOR

**FRAME** 

CERTIFICATE OF MAILING BY EXPRESS MAIL TO THE COMMISSIONER OF PATENTS AND TRADEMARKS

**Express Mail Label No:** 

EV263875235US

Date of Mailing:

March 19, 2003

I certify that the documents listed below:

- Amendment in response to Office Action of 1/16/03 (5pgs)
- Submission of Marked Up Claims (2pgs)
- Amendment transmittal form (3 pgs.- in duplicate)
- Certificate of Mailing via Express Mail (1 page)
- Return post card

are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. §1.10 on the date indicated above in an envelope addressed to the Commissioner for Patents, Washington, D.C. 20231.

EV263875235US

Daniel M. Fitzgerald

Reg. No. 38,880

Armstrong Teasdale LLP One Metropolitan Square, Suite 2600

Marie Carlo Ca

St. Louis, MO 63102

(314) 621-5070

OCT 1 7 2005

03-DV-7116 **PATENT** 

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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ADD.	ncant:	Dun.	ıap	$e_{\iota}$	aı.

Art Unit: 2834

Serial No.: 09/682,501

Examiner: Tamai, K.

Filed: September 10, 2001

For:

MECHANICAL JOINING FOR

WATER-COOLED MOTOR

**FRAME** 

**Commissioner for Patents** Washington, D.C. 20231

### **TRANSMITTAL**

Transmitted herewith is: 1. Amendment in response to Office Action dated January 16, 2003 (5pgs); Submission of Marked Up Claims (2pgs); Amendment Transmittal (3pgs - in duplicate); Certificate of Mailing by Express Mail (1pg); return postcard

#### **STATUS**

2.	Applicar	nt end of the control
		claims small entity status.
	X	is other than a small entity.

### CERTIFICATE OF MAILING/TRANSMISSION (37 C.F.R. 1.8a)

I hereby certify that this correspondence is, on the date shown below, being:

**MAILING** 

X deposited with the United States Postal Service Express Mail, Post Office to Addressee, Label No. EV263875235US, addressed to the Commissioner for Patents, Washington, D.C. 20231.

Date: \_\_\_\_\_3 -19-03

Daniel M. Fitzgerald Reg. No. 38,880

## EXTENSION OF TERM

3.	The proceedings herein are for a patent application and the provisions of 37 C.F.K.  1.136 apply.					
(complete (a) or (b), as applicable)						
(a) Applicant petitions for an extension of time under 37 C.F.R. 1.136 (Fees: 37 C.F.R. 1.17(a)-(d) for the total number of months checked below:)						
		Extension for response within:	Other than small entity Fee	Small entity Fee (if applicable)		
		First month	\$ 110.00	\$ 55.00		
	_	Second month	\$ 400.00	\$ 200.00		
	_	Third month	\$ 920.00	\$ 460.00		
	-	Fourth month	\$1,440.00	\$ 720.00		
	- -	Fifth month	\$1,960.00	\$ 980.00		
			Fee:	\$		
If a	n additional exter	nsion of time is required, p	lease consider this a pet	ition therefor.		
		(Check and complete the r	next item, if applicable)			
	t	An extension of more herefor \$ is deducted of extension now requested	I from the total fee due	cured. The fee paid for the total months		
		Extension fee due with t	his request \$			
			OR			
(b) X Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition for extension of time.						

### FEE FOR CLAIMS

4. T	he fee for clai	ms (37 C	C.F.R. 1.16(b	)-(d)) has	been calculated as sl	nown	below:
–	(Col. 1)	•	(Col. 2)	(Col. 3)	SMALL ENTITY		OTHER THAN SMALL ENTITY
	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NO. PREVIOUSLY PAID FOR	PRESENT EXTRA	ADDITIONAL. RATE FEE	OR	ADDITIONAL RATE FEE
	AMENDMENT	MINUS		=	x \$9 = \$	ļ	x \$18 = \$
TOTAL INDEP.		MINUS		=	x \$42 = \$		x \$84 = \$
	FIRST PRESEN	TATION OF	MULTIPLE DEP. (	CLAIM	+ \$130 = \$		+ \$280 = \$
					TOTAL ADDITIONAL FEE \$	OR	TOTAL ADDITIONAL FEE \$
	(a) <u>X</u>	No add	itional fee fo	r Claims	s required		
				OR			
	(b)	_ Total a	dditional fee	for claim	s required \$		
			FEE	PAYME	NT		
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			FEE I	EFICIE	NCY		
6.	$\frac{\mathbf{X}}{01-23}$	y addition 384.	nal extension	and/or fe	e is required, charge	Depo	osit Account No.
			1	AND/OR			
	X If any 2384		nal fee for cl	aims is re	quired, charge Depos	sit Ac	count No. 01-
7.	Othe	r:		H / (	Daniel M. Fitzgerald Registration No. 38,8 ARMSTRONG TEA One Metropolitan Sq St. Louis, MO 63102 814/621-5070	80 SDA uare,	LE LLP





03-DV-7116 PATENT

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Dunlap et al.	Αp	plicant:	Dunlap	et al.
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Art Unit: 2834

Serial No.: 09/682,501

Examiner: Tamai, K.

Filed: September 10, 2001

September 10, 2001

For:

MECHANICAL JOINING FOR

WATER-COOLED MOTOR

**FRAME** 

Commissioner for Patents Washington, D.C. 20231

### TRANSMITTAL

1. Transmitted herewith is:
Amendment in response to Office Action dated January 16, 2003 (5pgs); Submission of Marked Up Claims (2pgs); Amendment Transmittal (3pgs – in duplicate); Certificate of Mailing by Express Mail (1pg); return postcard

### **STATUS**

2.	Applican	t
	- 11	claims small entity status.
	X	is other than a small entity.

# CERTIFICATE OF MAILING/TRANSMISSION (37 C.F.R. 1.8a)

I hereby certify that this correspondence is, on the date shown below, being:

### MAILING

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Date: 3-19-03

Daniel M. Fitzgerald Reg. No. 38,880

M Infacialo

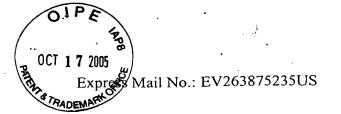
# EXTENSION OF TERM

3.	The proceedings herein are for a patent application and the provisions of 37 C.F.R.					
	1.136 apply.		(b), as applicable)			
(a) Applicant petitions for an extension of time under 37 C.F.R. 1.136 (Fees: 37 C.F.R. 1.17(a)-(d) for the total number of months checked belo						
		Extension for response within:	Other than small entity Fee	Small entity Fee (if applicable)		
		First month	\$ 110.00	\$ 55.00		
		Second month	\$ 400.00	\$ 200.00		
		Third month	\$ 920.00	\$ 460.00		
		Fourth month	\$1,440.00	\$ 720.00		
		Fifth month	\$1,960.00	\$ 980.00		
			Fee:	\$		
If	an additional ext	ension of time is required, p		ition therefor.		
		(Check and complete the	next item, if applicable)			
An extension of months has already been secured. The fee paid therefor \$ is deducted from the total fee due for the total months of extension now requested.						
		Extension fee due with	this request \$			
			OR			
	(b) X Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition for extension of time.					
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### FEE FOR CLAIMS

4. T	he fee for clai	ms (37 C	C.F.R. 1.16(b	)-(d)) has l	peen calculated as sl	nown	OTHER THAN
	(Col. 1)		(Col. 2)	(Col. 3)	SMALL ENTITY		SMALL ENTITY
	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NO. PREVIOUSLY PAID FOR	PRESENT EXTRA	ADDITIONAL. RATE FEE	OR	ADDITIONAL RATE FEE
TOTAL		MINUS		=	x \$9 = \$		x \$18 = \$
TOTAL INDEP.		MINUS		=	x \$42 = \$		x \$84 = \$
	FIRST PRESEN	TATION OF	MULTIPLE DEP.	CLAIM	+ \$130 = \$		+ \$280 = \$
					TOTAL ADDITIONAL FEE .\$	OR	TOTAL ADDITIONAL FEE \$
	(a) <u>X</u>	No add	litional fee fo	or Claims is	s required		
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7.	Othe	er:		R A C	paniel M. Fitzgerald egistration No. 38,8 RMSTRONG TEA one Metropolitan Sq t. Louis, MO 63102	880 SDA uare,	LE LLP
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# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Dunlap et al.

Art Unit: 2834

Serial No.: 09/682,501

Examiner: Tamai, K.

Filed: September 10, 2001

MECHANICAL JOINING FOR

WATER-COOLED MOTOR

**FRAME** 

For:

#### **AMENDMENT**

Commissioner for Patents Washington, D.C. 20231

Applicants respectfully request consideration and entry of the following amendment submitted in response to the Office Action dated January 16, 2003.

### IN THE CLAIMS

1. (twice amended) A stator frame for an electric motor, said stator frame comprising:

a substantially cylindrical shaped body section having opposed ends, and a cooling passageway extending through at least a portion of said body section, said cooling passageway comprising a cooling conduit;

an inlet port and an outlet port in flow communication with said cooling passageway; and

at least one spacer bar comprising a notched side and at least one finger projecting outwardly from said notched side, said at least one finger crimpable around said cooling conduit such that upon crimping said at least one finger extends circumferentially around said cooling conduit substantially surrounding said cooling conduit and mechanically coupling said spacer bar to said cooling conduit.

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8. (twice amended) An electric motor, comprising:

a stator frame comprising a substantially cylindrical shaped body section having opposed first and second ends, and a cooling passageway extending through at least a portion of said body section, said frame further comprising an inlet port and an outlet port in flow communication with said cooling passageway, said cooling passageway comprising a cooling conduit;

- a first end shield secured to said first stator frame end;
- a second end shield secured to said second stator frame end; and

at least one spacer bar mechanically coupled to said cooling conduit, said spacer bar comprising a notched side and at least one finger projecting outwardly from said notched side, said at least one finger crimpable around said cooling conduit such that upon crimping said at least one finger extends circumferentially around said cooling substantially surrounding said cooling conduit and mechanically coupling said spacer bar to said cooling conduit.

#### Remarks

The Office Action mailed January 16, 2003 has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Applicants and the undersigned wish to express their appreciation to the Examiner for the courtesies he extended during a telephone interview that occurred on March 12, 2003. During the interview, the Office Action dated January 16, 2003 was discussed. More specifically, Claims 1 and 8 and the recitation "substantially surrounding said cooling conduit ..." were discussed along with the cited references, namely Crowell et al. (US 5,859,482). During the interview, Applicants and the Examiner agreed that Crowell et al. neither described nor suggested the claimed invention. Accordingly, the following amendment has been made in consequence thereof. Submitted herewith is a Submission of Marked Up Claims.

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Claims 1-15 are now pending in this application. Claims 1-15 stand rejected.

The rejection of Claims 1-15 under 35 U.S.C. § 102(b) as being anticipated by Crowell et al. (US 5,859,482) ("Crowell") is respectfully traversed.

Applicants respectfully submit that Crowell does not describe nor suggest the claimed invention. As discussed below and as agreed to during the Examiner Interview, at least one of the differences between Crowell and the present invention is that Crowell neither describes nor suggests a spacer bar having a notched side and at least one finger projecting outwardly from the notched side wherein the at least one finger is crimpable around a cooling conduit such that upon crimping the at least one finger extends circumferentially around the cooling conduit substantially surrounding the cooling conduit and mechanically coupling the spacer bar to the cooling conduit.

Crowell describes a liquid cooled electric motor stator frame (102) that includes a cooling conduit (142). Cooling conduit (142) is arranged in a generally helical configuration and stator frame (102) is cast around cooling conduit (142) such that conduit (142) is embedded within, and integral with, stator frame (102). A plurality of spacer bars (152) provide support for cooling conduit (142) and facilitate maintaining a desired spacing between a plurality of lengths of cooling conduit (142) and between conduit (142) and a stator frame wall.

Claim 1 recites a stator frame for an electric motor that includes a cooling conduit, and "at least one spacer bar comprising a notched side and at least one finger projecting outwardly from said notched side, said at least one finger crimpable around said cooling conduit such that upon crimping said at least one finger extends circumferentially around said cooling conduit substantially surrounding said cooling conduit and mechanically coupling said spacer bar to said cooling conduit."

Crowell does not describe nor suggest a stator frame for an electric motor that includes at least one spacer bar having a notched side and at least one finger projecting outwardly from the notched side wherein the at least one finger is crimpable around a cooling

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conduit such that upon crimping the at least one finger extends circumferentially around the cooling conduit substantially surrounding the cooling conduit and mechanically coupling the spacer bar to the cooling conduit.

Rather, Crowell describes a liquid cooled electric motor stator frame that includes a plurality of spacer bars that engage a cooling conduit. Although Crowell describes at column 5, lines 37-38; column 6, lines 46-49; and column 7, lines 8-11 spacer bars that are engaged to a conduit, Crowell does not describe nor suggest a spacer bar having a notched side and at least one finger projecting outwardly from the notched side wherein the at least one finger is crimpable around a cooling conduit such that upon crimping the at least one finger extends circumferentially around the cooling conduit substantially surrounding the cooling conduit and mechanically coupling the spacer bar to the cooling conduit. For at least the reasons set forth above, Claim 1 is submitted to be patentable over Crowell.

Claims 2-7 depend, directly or indirectly, from independent Claim 1. When the recitations of Claims 2-7 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 2-7 likewise are patentable over Crowell.

Claim 8 recites an electric motor that includes a cooling conduit, and "at least one spacer bar mechanically coupled to said cooling conduit, said spacer bar comprising a notched side and at least one finger projecting outwardly from said notched side, said at least one finger crimpable around said cooling conduit such that upon crimping said at least one finger extends circumferentially around said cooling conduit substantially surrounding said cooling conduit and mechanically coupling said spacer bar to said cooling conduit."

Crowell does not describe nor suggest an electric motor that includes a cooling conduit, and at least one spacer bar mechanically coupled to a cooling conduit, wherein the spacer bar has a notched side and at least one finger projecting outwardly from the notched side, and wherein the at least one finger is crimpable around the cooling conduit such that upon crimping the at least one finger extends circumferentially around the cooling conduit substantially surrounding the cooling conduit and mechanically coupling the spacer bar to the cooling conduit.

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More specifically, Crowell does not describe nor suggest a spacer bar having a notched side and at least one finger projecting outwardly from the notched side wherein the at least one finger is crimpable around a cooling conduit such that upon crimping the at least one finger extends circumferentially around the cooling conduit substantially surrounding the cooling conduit.

Rather, Crowell describes a liquid cooled electric motor stator frame that includes a plurality of spacer bars that engage a cooling conduit. Although Crowell describes a spacer bar that engages a cooling conduit, Crowell does not describe nor suggest a spacer bar having a notched side and at least one finger projecting outwardly from the notched side wherein the at least one finger is crimpable around a cooling conduit such that upon crimping the at least one finger extends circumferentially around the cooling conduit substantially surrounding the cooling conduit and mechanically coupling the spacer bar to the cooling conduit. For at least the reasons set forth above, Claim 8 is submitted to be patentable over Crowell.

Claims 9-15 depend, directly or indirectly, from independent Claim 8. When the recitations of Claims 9-15 are considered in combination with the recitations of Claim 8, Applicants submit that dependent Claims 9-15 likewise are patentable over Crowell.

For at least the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 1-15 be withdrawn.

In view of the foregoing amendment and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,

Daniel M. Fitzgerald Registration No. 38,880

ARMSTRONG TEASDALE LLP

One Metropolitan Square, Suite 2600

St. Louis, Missouri 63102-2740

(314) 621-5070

Express Mail No.: EV26. 75235US 03-DV-7116 PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Dunlap et al.

Art Unit: 2834

Serial No.: 09/682,501

Examiner: Tamai, K.

Filed: September 10, 2001

For:

MECHANICAL JOINING FOR

WATER-COOLED MOTOR

**FRAME** 

### SUBMISSION OF MARKED-UP CLAIMS

Commissioner for Patents Washington, D.C. 20231

Submitted herewith are marked up claims in accordance with 37 CFR 1.211(c)(1)(ii).

### IN THE CLAIMS

1. (twice amended) A stator frame for an electric motor, said stator frame comprising:

a substantially cylindrical shaped body section having opposed ends, and a cooling passageway extending through at least a portion of said body section, said cooling passageway comprising a cooling conduit;

an inlet port and an outlet port in flow communication with said cooling passageway; and

at least one spacer bar comprising a notched side and at least one finger projecting outwardly from said notched side, said at least one finger crimpable around said cooling conduit such that upon crimping said at least one finger extends circumferentially around said cooling conduit [to said notched side] substantially surrounding said cooling conduit and mechanically coupling said spacer bar to said cooling conduit.

8. (twice amended) An electric motor, comprising:

a stator frame comprising a substantially cylindrical shaped body section having opposed first and second ends, and a cooling passageway extending through at least a portion Express Mail No.: EV26-37,5235US

of said body section, said frame further comprising an inlet port and an outlet port in flow communication with said cooling passageway, said cooling passageway comprising a cooling conduit;

a first end shield secured to said first stator frame end;

a second end shield secured to said second stator frame end; and

at least one spacer bar mechanically coupled to said cooling conduit, said spacer bar comprising a notched side and at least one finger projecting outwardly from said notched side, said at least one finger crimpable around said cooling conduit such that upon crimping said at least one finger extends circumferentially around said cooling conduit [to said notched side] substantially surrounding said cooling conduit and mechanically coupling said spacer bar to said cooling conduit.

In view of the foregoing amendment and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,

Daniel M. Fitzgerald Registration No. 38,880

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(314) 621-5070



THE UNITED STATES PATENT OFFICE IS REQUESTED TO IMPRESS ITS STAMP ON THIS CARD AND PLACE SAME IN THE OUTGOING MAIL TO SHOW THE FOLLOWING PAPERS HAVE BEEN RECEIVED.

Atty Dkt. No: 03DV-7116 (12552-330)

Application of: Dunlap et al. Patent No: 6,633,097 B2 Issued: October 14, 2003

For: MECHANICAL JOINING FOR WATER COOLED MOTOR FRAME

Enclosed:

Request for Certificate of Correction of Patent (1 pg. in duplicate)

Form PTO/SB/44 (1 pg. in duplicate)

PAS/kls

Date Mailed: March 07, 2005



Patent No.: 6,633,097 B2

Issued: October 14, 2003

Inventors: Dunlap et al.

Assignee: General Electric Company

For: MECHANICAL JOINING FOR WATER

COOLED MOTOR FRAME

CERTIFICATE OF MAILING

I certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-

1450., on March 07, 2005.

Phillip A. Shipley Reg. No. 51,357

Hon. Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450.

# REQUEST FOR CERTIFICATE OF CORRECTION OF PATENT UNDER 37 C.F.R. 1.322(a)

Sir:

Attached, in duplicate, is Form PTO/SB/44 with one copy being suitable for printing.

In Claim 8, column 6, line 24, after "first stator frame end;" insert -- a second end shield secured to said second stator frame end; and --.

The correction is not due to any error by applicants and no fee is due.

The Assignment for this patent is recorded on Reel 011946/ Frame 0702.

Respectfully submitted,

Date: 3/7/05

Phillip A. Shipley Reg. No. 51,357

ARMSTRONG TEASDALE LLP One Metropolitan Square, Suite 2600 St. Louis, Missouri 63102-2740

(314) 621-5070

Approved for use through 04/30/2007. OMB 0651-0033 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

(Also Form PTO-1050)

# UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO

: 6,633,097 B2

DATED

: October 14, 2003

INVENTORS(S)

: Dunlap et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In Claim 8, column 6, line 24, after "first stator frame end; " insert -- a second end shield secured to said second stator frame end; and --.

MAILING ADDRESS OF SENDER:

Phillip A. Shipley Reg. No: 51,357 Armstrong Teasdale LLP One Metropolitan Sq., Suite 2600 St. Louis, MO 63102 PATENT NO. 6,633,097 B2

No. of additional copies

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

Patent No.

:6,633,097

Inventor

:Dunlap et al.

Patent Issued

:October 14, 2003

Docket No.

:03DV-7116

Re: Request for Certificate of Correction

Consideration has been given your request for the issuance of a certificate of correction for the above-identified patent under the provisions of Rule(s) 1.322.

Inspection of the application for the patent reveals, however, that in connection with the alleged error to which applicant refer; Claim 8, column 6, line 24 is printed in accordance with the record of the Patent and Trademark Office as passed to issue by the examiner. There being no fault on the part of the Patent and Trademark Office, it has no authority to a issue certificate of correction under the provisions of 35 U.S.C. 254 and Rule 322 of the Rules of Practice of the United States Patent and Trademark Office in Patent Cases.

In view of the foregoing, applicants request is hereby denied.

Any telephone inquiry concerning this communication should be directed to Ms. A. Green at (703) 308-9380 ext. 123. Further correspondence concerning the matter should be filed and directed to Decisions & Certificate of Correction Branch. Any response(s) must be filed within a two-month period.

Cecelia Newman

Decisions & Certificates

of Correction Branch

(703) 308-9390 or

(703) 308-9380 ext. 123.

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CBN/arg